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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,174	02/12/2004	Shingo Kakui	04329.3242	3093

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EXAMINER	
JACKSON, BLANE J	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/776,174	KAKUI, SHINGO	
	Examiner	Art Unit	
	Blane J. Jackson	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp (US 6,526,284) in view of Moers (US 6,957,053).

As to claims 1, 7, 8 and 9, Sharp teaches a method of managing information applicable to a communication device and a communication device comprising:

A category determining unit which determines a category of the received information (column 10, lines 46-56, column 5, line 41 to column 6, line 35, figure 1, a receiving device (70) operating in accordance with a DAB or RDS network to identify a specific category of information, segments of geographic data),

A storage unit which stores the received information as effective information in accordance with determining results of the category determining unit (column 10, line 57 to column 11, line 31, the receiving device (70) to receive and store data elements

where each includes an identifier and a specific single segment to build a complete segmented map),

An information deletion unit which deletes information of the same category received prior to the latest received information from the storage unit (column 11, lines 32-43, the application of the mobile device *can make intelligent judgments as to when it should delete* old map squares due to storage constraints).

Sharp teaches an antenna module which receives information data elements, segments of a map, through wireless communication regardless of the order in which they are received from a system which periodically retransmits each data element, column 8, lines 31-47, but does not teach the antenna module includes a receiver sensitivity measuring function and a determining unit which determines effectiveness of the received information in accordance with the receiver sensitivity measured by the antenna module.

Moers teaches a method to search and store information of radio broadcast signals, an FM RDS receiver, column 3, lines 38-44 based on a predetermined field strength, permanency threshold level and selected category, column 1, line 45 to column 5, line 5. Moers discloses an example operation to reproduce an information category, traffic messages where the criterion to select an appropriate traffic message transmitting RDS broadcast station is based on the permanency factor and, if the highest permanency factor is shared by various transmitters, then the field strength factor is used to determine the best (closest) station to receive, column 6, lines 16-22.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the simple reception of retransmit signal method of Sharp with the selected transmitter method of Moers to insure the best signal and information from the closest transmitter sending information most relevant to the user.

As to claim 2, Moers of Sharp modified teaches the communication device according to claim 1, wherein if a plurality of sending device of the information are provided, the determining unit determines information transmitted from a sending device located at a relatively short distance to be effective by calculating distances from the sending devices of the information in accordance with the receiver sensitivity (column 6, lines 16-28, the category example is traffic messages and the transmitter with the highest field strength is in practice nearest to the receiver location).

As to claim 3, Sharp teaches the communication device according to claim 1 further comprising:

A category information storage unit which stores category information indicating the category of the effective information wherein,

The category determining unit determines the relevant received information to be effective when the category of the information received with the antenna module matches the category indicated by the category information (column 8, lines 16-57, the receiving device, automatically or user directed, tunes the selected local channel with

header identifiers to identify the information category or type to receive and store the map segments and build the complete local map).

As to claim 4, Sharp teaches the communication device according to claim 1 wherein the information deletion unit deletes previous information of the same category *when the application determines it should delete old segments due to storage constraints or distance from the information currently being received*, column 11, lines 32-43, but does not specifically teach the old information is **deleted before the effective information is stored** in the storage unit. However, given processor based application of Sharp is programmed to monitor available storage and make addition/ deletion decisions, it would have been obvious to one of ordinary skill in the art at the time of the invention to recognize Sharp would need to delete old information when it is detected the existing storage space is insufficient for additional more current and relevant information.

As to claim 5, Sharp teaches the communication device according to claim 1 wherein the information deletion unit deletes previous information of the same category *when the application determines it should delete old segments due to storage constraints or distance from the information currently being received*, column 11, lines 32-43, but does not specifically teach the old information is **deleted after the effective information is stored** in the storage unit. However, given the processor based application of Sharp is programmed to monitor available storage and make addition/

deletion decisions, it would have been obvious to one of ordinary skill in the art at the time of the invention to recognize Sharp would need to delete old information when it is detected the existing storage space is insufficient for additional more current and relevant information.

As to claim 6, Sharp teaches the communication device according to claim 1 wherein the information deletion unit deletes previous information of the same category *when the application determines it should delete old segments due to storage constraints or distance from the information currently being received*, column 11, lines 32-43, but does not specifically teach the old information is **deleted before the effective information is stored** in the storage unit. However, given processor based application of Sharp is programmed to monitor available storage and make addition/ deletion decisions, it would have been obvious to one of ordinary skill in the art at the time of the invention to realize Sharp would recognize the need to delete old information when it is detected the existing storage space is insufficient for additional more current and relevant information.

Sharp does not teach the determining unit determines information transmitted from a sending device located at a relatively short distance to be effective by calculating distance from the sending devices of the information in accordance with the receive sensitivity if a plurality of sending devices of the information are provided.

Moers teaches a method to search and store information of radio broadcast signals, an FM RDS receiver, column 3, lines 38-44 based on a predetermined field

strength, permanency threshold level and selected category, column 1, line 45 to column 5, line 5. Moers discloses an example operation to reproduce an information category, traffic messages where the criterion to select an appropriate traffic message transmitting RDS broadcast station is based on the permanency factor and, if the highest permanency factor is shared by various transmitters, then the field strength factor is used to determine the best (closest) station to receive, column 6, lines 16-22.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the simple reception of the retransmitted information as taught by Sharp with the selected transmitter method of Moers to insure the best signal and information from the closest transmitter sending information most relevant to the user.

As to claim 10, Sharp teaches the method according to claim 9 wherein the deleting is to delete from the storage unit the information of the particular category received from the wireless communication base stations, column 11, lines 32-43, but is silent as to deleting information other than the wireless communication base station located at the relatively short distance in accordance with a determining result of the effectiveness determining.

Moers teaches an example where the receiver is selected to reproduce a specific category, traffic messages, where the transmitter to be received is selected by the highest field strength which is in practice nearest to the receiver location, column 6, lines 16-28.

It would have been obvious to one of ordinary skill in the art at the time of the invention recognize the information deletion decisions by Sharp would be dictated by the transmitter selection method of Moers such that storage space would be available for the information of the nearby transmitter which is the most relevant to the user.

As to claim 11 with respect to claim 9, Sharp teaches deleting the information of the particular category from the storage unit when the information of the particular category determined to be receivable and effective is stored in the storage unit, column 11, lines 32-43, but is silent as to *deleting all* the information of the particular category when information of a particular category is to be stored.

However, given the processor based application of Sharp is programmed to monitor available storage and make addition/ deletion decisions, it would have been obvious to one of ordinary skill in the art at the time of the invention to realize Sharp would recognize the need to delete any amount of old information prior to receiving current information when it is detected the old information was received at a predetermined distance away from the current reception position.

As to claim 12 with respect to claim 8, Sharp teaches a method of managing information applicable to a communication device having an antenna module which receives information transmitted through wireless communication, column 11, lines 32-43, but does not teach receiving, storing and selecting with the antenna module,

identification code information delivered from a plurality of wireless communication devices placed with respect to each predetermined area.

Moers teaches: receiving the antenna module, identification code information delivered from a plurality of wireless communication devices placed with respect to each predetermined area,

Storing information corresponding to the identification code information received with the antenna module in an internal storage unit (column 4, lines 23-52, scanning operation of the RF FM band for RDS broadcast information, the tuning data (the channel is the identification code for storage) is stored along with a permanency factor, reception field strength and RDS data codes),

Selecting from the internal storage unit, the information corresponding to the identification code information received from a wireless communication device located at a relatively short distance among the respective wireless communication devices (column 6, lines 16-28, example of selecting the nearest transmitter when selecting the RDS code for traffic messages),

Determining suitability of reception of the identification code information from the respective wireless communication devices (column 6, lines 16-28, RDS data for a specific information code, such as traffic messages),

Deleting all the information regarding the identification code information stored in the internal storage unit when the reception of the identification code information from the respective wireless communication devices is not possible (column 5, lines 25-53, if

a station fails the permanency test subsequent to the repeated scan operation, then all data in the data memory at the storage address of a station is removed).

However, given the processor based application of Sharp is programmed to monitor available storage and make addition/ deletion decisions, it would have been obvious to one of ordinary skill in the art at the time of the invention to recognize Sharp would need to track and delete old information from storage when it is detected the existing storage space is insufficient for additional more current and relevant information.

As to claim 13, Moers of Sharp modified teaches a method according to claim 12 wherein the identification code information is information to identify a position of the area on which the respective wireless communication devices are placed (column 6, lines 16-28, measured field strength during the scan to determine distance of transmitters to the receiver in a given local area).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koster (US 2004/0203909), Hirono (US 6,246,958), Sasaki et al. (US 6,006,089), Hashimoto (US 6,338,020), Pechatnikov et al. (US 6,898,516), Suzuki et al. (US 6,330,453), Okamoto (US 6,697,631), Suenaga et al. (US 5,745,845), Pechatnikov et al. (US 6,904,360), Koyama (US 5,493,711), Emerson et al. (US 5,842,119),

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-7890. The examiner can normally be reached on Monday through Friday, 9:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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